



Faculty of Cognitive Sciences and Human Development

**RELATIONSHIPS BETWEEN SELF-REGULATED AND ACADEMIC  
PERFORMANCE AMONG GRADUATE STUDENTS**

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**RELATIONSHIPS BETWEEN SELF-REGULATED AND ACADEMIC PERFORMANCE  
AMONG GRADUATE STUDENTS**

**ZARIFAH BINTI MOS**

This project is submitted  
in partial fulfilment of the requirements for a  
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The project entitled 'Relationships Between Self-Regulated Learning and Academic Performance among Graduate Students' was prepared by Zarifah Binti Mos and submitted to the Faculty of Cognitive Sciences and Human Development in partial fulfillment of the requirements for a Bachelor of Science with Honours (Cognitive Science)

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## Table of Contents

<b>ACKNOWLEDGEMENT .....</b>	<b>i</b>
<b>Table of Contents .....</b>	<b>ii</b>
<b>List of Figures .....</b>	<b>iv</b>
<b>List of Tables.....</b>	<b>v</b>
<b>ABSTRACT .....</b>	<b>vi</b>
<b>ABSTRAK.....</b>	<b>vii</b>
<b>CHAPTER ONE : INTRODUCTION .....</b>	<b>8</b>
1.0 Introduction .....	8
1.1 Background of the study .....	9
1.2 Problem Statement .....	10
1.3 Research Objectives .....	12
1.3.1 General Objectives .....	12
1.3.2 Specific Objectives.....	12
1.4 Hypotheses .....	12
1.5 Conceptual Framework .....	13
1.6 Definition of Terms .....	13
1.6.2 Academic Performance .....	14
1.6.3 Motivation .....	14
1.6.4 Learning Strategies.....	15
1.7 Significant of the Study.....	15
<b>CHAPTER TWO : LITERATURE REVIEW .....</b>	<b>16</b>
2.0 Introduction .....	16
2.1 Literature Review .....	16
2.2 Self-Regulated Learning (SRL) Model .....	20
2.3 Conclusion.....	22
<b>CHAPTER THREE : RESEARCH METHODOLOGY.....</b>	<b>23</b>
3.0 Introduction .....	23
3.1 Research Design.....	23
3.2 Population and Sampling .....	24
3.2.1 Population.....	24
3.2.2 Sample and Sampling Method .....	24

3.3 Research Instrument.....24

3.3.1 Section A: Demography .....25

3.3.2 Section B: Motivated Strategies for Learning Questionnaire (MSLQ).....25

3.4 Back To Back Translation.....26

3.4.1Pilot Test .....27

3.5 Data Collection.....28

**CHAPTER FOUR : RESULTS.....30**

4.0 Introduction .....30

4.1 Section A: Student’s Demographic Background.....30

4.1.1 Analysis of Graduate Student’s Gender .....31

4.1.2 Analysis of Graduate Student’s Age .....31

4.1.3 Analysis of Graduate Student’s Ethnicity .....31

4.1.4 Analysis of Graduate Student’s Current CGPA .....32

4.1.5 Analysis of Graduate Student’s Occupation.....32

4.2 Hypothesis Testings .....33

4.2.1 Part 1: Hypothesis ( $H_01$ ).....33

4.2.2 Part 2: Hypothesis ( $H_02$ ).....34

4.3 Summary of Pearson Correlation Coefficient’s Results.....36

4.4 Summary .....36

**CHAPTER FIVE : DISCUSSION .....37**

5.1 Introduction .....37

5.2 Summary .....37

5.2.1  $p$  value .....37

5.2.2  $r$  value.....38

5.3 Limitations of Study.....37

5.3.1 Questionnaire.....39

5.3.2 Recommendations for Future Research.....39

5.4 Conclusion.....40

**REFERENCES .....41**

**APPENDIX A - D ..... 43 - 59**



**List of Figures**

Figure 1 The Conceptual Framework of Independent Variables and Dependent Variable.....13

Figure 2 The Self-Regulated Learning (SRL) Model.....20

Figure 3 7-point Likert Scale of MSLQ .....25

Figure 4 Guidelines of Interpretation Pearson Correlation Test.....29

## List of Tables

Table 1 Component in the MSLQ .....	26
Table 2 Pilot Test with Value of Cronbach's Alpha .....	27
Table 3 Analysis of the Hypotheses by using the Pearson Correlation Test.....	29
Table 4 Numbers of Graduate Students by Gender .....	30
Table 5 Numbers of Graduate Students by Age.....	31
Table 6 Numbers of Graduate Students by Ethnicity .....	31
Table 7 Numbers of Graduate Students by Current CGPA.....	32
Table 8 Numbers of Graduate Students by Occupation .....	32
Table 9 Correlations of Motivation and Academic Performance of Graduate Students. ....	33
Table 10 Correlations of Learning Strategies and Academic Performance of Graduate Students.....	34
Table 11 Summary of the Hypothesis Testing Results .....	36

## **ABSTRACT**

The purpose of this study was to analyse relationships between self-regulated learning and academic performance among graduate students. Eighty graduate students from the Faculty of Cognitive Sciences and Human Development were randomly recruited whom enrolled in the Learning Sciences Programme and the Human Resources Programme of session 2015/2016. The Motivated Strategies for Learning Questionnaire was administered. The Pearson correlation analysis was explored in data analysis. Two independent variables were motivation and learning strategies and academic performance measured as a dependent variable. Findings showed that there was no relationship between motivation and learning strategies with academic performance. Implication also discussed about why these two independent variables were not affect the dependent variable in this study.

## ***ABSTRAK***

Tujuan kajian ini adalah untuk mengkaji hubungan antara pembelajaran pengaturan sendiri dengan pencapaian akademik dalam kalangan pelajar Pascasiswazah. Lapan puluh orang pelajar Pascasiswazah daripada Fakulti Sains Kognitif dan Pembangunan Sumber Manusia telah dipilih dari Program Pembelajaran Sains dan Program Sumber Manusia sesi 2015/2016. Borang soal selidik *Motivated Strategies for Learning Questionnaire* telah ditadbir. Analisis Korelasi Pearson digunakan dalam menganalisis data. Dua pembolehubah yang terlibat dalam kajian ini adalah motivasi dan strategi pembelajaran dan pencapaian akademik diukur sebagai pembolehubah bersandar. Keputusan menunjukkan tidak terdapat hubungan antara motivasi dan strategi pembelajaran terhadap pencapaian akademik. Implikasi juga membincangkan tentang mengapa kedua-dua pembolehubah tidak mempengaruhi pembolehubah bersandar dalam kajian ini.



# CHAPTER ONE

## INTRODUCTION

### 1.0 Introduction

Every year, the numbers of graduate students in educational institutions rise slightly. These graduate students really do play an important role in country development either in education, economic growth, or other sector. In addition, worker with high qualifications in skills and knowledge are most needed where it can contribute towards development and improvement of local or international organizations. Self-regulated learning is very essential to the graduate students where they would be able to perform well in academic, practical and become an excellent student. Self-regulated learning should be applied and embedded inside the students as long as they are still learning as a student in educational institutions. According to Cheng (2011), learning to study is the skill to pursue and continue in learning, handle one's own learning that includes effective time management and information.

Originally, self-regulated learning is referred to productive process whereby learners set objectives, then effort to monitor, regulate, and control their cognition, motivation, and behaviour, guided, which are controlled by their goals and the contextual features in the environment for their learning. All these elements are known to influence the self-regulated learning of the learners in learning situation. It also can be said that the self-regulated learning is the ways of learners itself taking control of their own learning process. By having this process in their learning, it will help to inspire the student to learn and accomplish the task. Identification of students with high or poor in self-regulation learning also can be identified. Self-regulated learning can be embedded inside the student especially the student who lacks or has poor self-regulated learning. However, this kind of learning also can be

naturally innate within the student who is highly self-regulated and seeking to be the best among his or her peers.

According to Schunk (2005), most of the researchers today implement self-regulatory values to education learning and other learning forms, such as social and motor skills (Boekaerts, Pintrich, & Zeidner, 2000; Zimmerman & Schunk, 2001, p.85).

### **1.1 Background of the study**

Self-regulated learning's research has been done by many researchers especially in the area of educational psychology. For several years, Pintrich is an outstanding and well known researcher in this field of study. Pintrich has contributed many ideas and thought in his research regarding on self-regulated learning and this is why another researcher claimed he was a foremost figure in the field of self-regulated learning (Schunk, 2005). From this, it can be said that self-regulated learning is a one educational legacy in educational psychology from Pintrich. Another researcher also have been together in contributed the ideas in the same field. This happen due to people does believe that self-regulated learning is essential in learner's everyday life.

According to Zimmerman (2001), the research presenting that learner's skill and capabilities actually did is not enough to describe the student achievement. He then proposed factors such as self-regulation and motivation which were seen as a good mechanism in explaining the student achievement and contributes to student improvement. In this study, researcher used two main factors in self-regulated learning such as motivation and learning strategies. Motivation consists of six sub-scales which are intrinsic and extrinsic goal, task value, control of learning beliefs, self-efficacy and test anxiety. For learning strategies consists of nine sub-scales for instance rehearsal, elaboration, organization, critical thinking,

metacognitive self-regulation, time management, effort regulation, peer learning and help seeking.

Nowadays, some of the students have lack in self-regulation due to some factors. These impact the student performance itself in educational or academic achievement. Meanwhile in order to produce an excellent student, high self-regulated learning must exists inside the student in learning process. It is reasonable to state that student with high or good self-regulated learning is able to achieve good performance or vice versa. The ability of student in completing the task given also might be influenced from student self-regulated learning. The researcher also places the interest with the problem statements and objectives as main discussion in this research. This research was conducted among the graduate students in Faculty of Cognitive Sciences and Human Development, Universiti Malaysia Sarawak.

## **1.2 Problem Statement**

Nowadays, many graduate students in Universiti Malaysia Sarawak itself do not aware about the important of self-regulated learning in their learning process. The student itself does not know what is self-regulated learning and how this learning actually can drives their motivation to learn. Actually, self-regulation has been an essential learning process or mechanism in students learning that contributes in student education such as getting a good achievement in academic and practical. Self-regulated learning involves the learners and their environment and this influenced the learner's achievement (Pintrich, 2000b; Pintrich & Zusho, 2002). Besides, Pintrich also claimed that the learners also may simultaneously engage in some stages of self-regulated learning such as forethought, planning and activation, monitoring, control, reaction and reflection.

Besides, there are many studies on undergraduate students about self-regulated learning, however this kind of study still limited to the graduate students. For example, many past studies that has been done by Pintrich and Zimmerman on 1990 in previous years using undergraduate students as their samples. The previous studies were conducted only in West Country, but not in Malaysia. There might be some studies on this issue, and of course it is very limited numbers of studies that has been done especially using graduate students as sample of study.

Sometimes, the students do not know what exactly motivates them to learn, able to completed the task or getting a good result either in academic achievement or in practical task. They might be wrong in choosing the factors that can drive their motivation and sometimes underestimates with their own ability in learning. Poor self-regulation influences the student performance especially in education achievement. Student might get a bad result in examination, fail to accomplish the task given by lectures and unfortunately it can become worse when the student decide to dropout before the end of their study. Surely, this kind of situation should be taken care of before it becomes worse where student lose their motivation to learn this might give impacts to another students or peers.

Other than that, learning strategies in self-regulated learning also might influence student academic performance. According to Ames and Archer (1988), learning strategies and learning goals usually depend on the orientation of the learning. Different kind of learning orientation will surely make the students used different learning strategies and this might affect with their academic performance. Wrongly use of learning strategies in self-regulated learning in students would give bad performance.



### **1.3 Research Objectives**

#### **1.3.1 General Objective**

The general objective in this research is to study the relationship between self-regulated learning and academic performance among graduate students at Faculty of Cognitive Sciences and Human Development (FCSHD), Universiti Malaysia Sarawak.

#### **1.3.2 Specific Objectives**

The specific objectives for this study are:

1. To assess the relationship of motivation among graduate students and their academic performance; and
2. To assess the relationship learning strategies among graduate students and their academic performance.

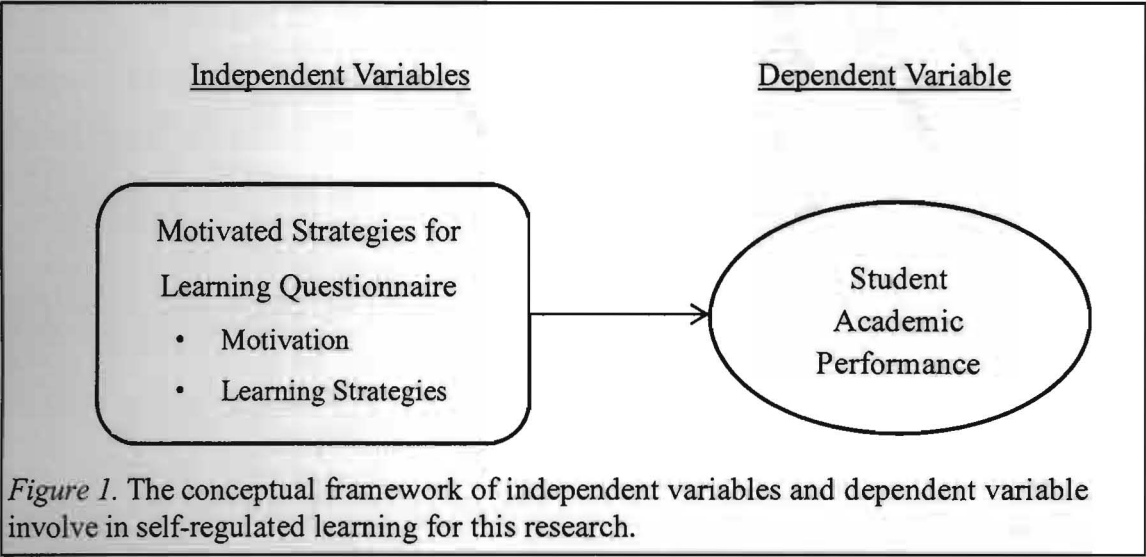
### **1.4 Hypotheses**

The hypotheses for this study are:

H<sub>01</sub>: There is no relationship of motivation among graduate students on their academic performance.

H<sub>02</sub>: There is no relationship learning strategies among graduate students on their academic performance.

1.5 Conceptual Framework



In this research, there were two independent variables that were involved such as motivation and learning strategies. These two variables highlighted in self-regulated learning and their influences towards student academic performance. A dependent variable for this research is student academic performance. Dependent variable is a value that results from the independent variables and it cannot be manipulated.

1.6 Definition of Terms

1.6.1 Self-regulated learning

*Conceptual Definition*

The conceptual definition for self-regulated learning is self-regulation developments applied during a learning experience, where the objective is an anticipated level of achievement (Sitzmann & Ely, 2011). Zimmerman (2001) also defined the self-regulated learning as process through which learners change mental capabilities into task-related academic skills.

### *Operational Definition*

Operational definition for self-regulated learning is referring to the graduate students on how they promote their self-regulated learning in their learning process.

### **1.6.2 Academic Performance**

#### *Conceptual Definition*

Ghamari (2011) defined academic performance as the learner's grade of their academic learning. Another researcher also defined academic performance as brilliance in all academic disciplines, in class as well as co-curricular activities (Ganai et al., 2013).

#### *Operational Definition*

The student educational achievement considered as the graduate student's total scores or their current result is operational definition for academic performance.

### **1.6.3 Motivation**

#### *Conceptual Definition*

Nevid (2013) defined motivation as elements that activate, direct, and sustain goal-directed behaviour. In addition, another conceptual definition for motivation is the learner's effort to realise their responsibilities, giving the determination and continuing it (Muhammad, 2015).

#### *Operational Definition*

In operational definition, motivation means that what exactly motivate the students itself or drives them to complete the tasks and to achieve their target successfully.

#### **1.6.4 Learning Strategies**

##### *Conceptual Definition*

Joseph and Lawrence (2009) defined learning strategies as an individual's method in using their information and they approach in learning process. Alharbi, Henskens and Hannaford (2014) defined learning strategies as an individual learning by using specific methods.

##### *Operational Definition*

The students learning strategies or their study skills used in learning process in order to complete the tasks.

#### **1.7 Significant of the Study**

Self-regulated learning is important element to student in terms of student's learning process and conducting this kind of research might aware the student about its essential. Other than that, the research information about the problem statement and objectives in this study could be referred by upcoming researchers who would like to reproduce this study as a source of reference. Besides that, the research instrument used in this research for instance Motivated Strategies for Learning Questionnaire (MSLQ) may well be used for upcoming research in the identical area. The findings from this research also possibly can be used to help another researcher or the reader itself to acknowledge the essential of self-regulated learning towards self-good achievement either in study or work.



## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.0 Introduction**

In this literature review, it discussed further regarding on previous research on self-regulated learning that has been conduct by some researchers. Besides, this part is introduced to firm the strong relationship of variables that will be used in this research.

#### **2.1 Literature Review**

Schunk (2005) has presented a review about self-regulated learning which highlighted the educational legacy of Pintrich (2000). According to Pintrich (2000), self-regulated learning is defines as vigorous, practical process in which learners set targets for their leaning and monitor, regulate and control their cognition, motivation, and behaviour, guided by their aims and the contextual features of the environment (p. 85). Other than that, self-regulated learning also was known as self-regulation. Besides, Pintrich also believe that all these activities of self-regulatory are correlated between learners and their environment and this will influence to the learner's achievement (Pintrich & Zusho, 2002). Pintrich is a famous theorist and researcher of self-regulated learning in education of psychology. Besides, he also claimed that self-regulated learning not only involves with cognition, but also involve with motivational and affective issues.

Pintrich and Groot (1990) have done a research about motivational and self-regulated of classroom with academic performance. In this research, Pintrich involved the theoretical framework in his research which is a general expectancy-value model of motivation. There are three elements of motivational that may be related to the three different elements of self-

regulated learning, for instance expectancy mechanisms, value mechanisms, and affective mechanisms. An expectancy mechanism is about the learner's belief where they have ability to perform the task given. In this mechanism, the learners involves with metacognition, using their cognitive strategies and effort in management. For example when answering to the question, "Can I do this task?". The value mechanism is related with learner's goals and their belief about the meaning and attention of the task. It will involve intrinsic and extrinsic orientation task value. It can be said that this value component is worries with student's reasons for doing the task, for example "Why am I doing this task?" The last motivational element is affective mechanism. This mechanism is involved with test anxiety where there will be different of affection reactions that related to the learner's concern or emotional reaction. The affection mechanism involves the learner in answering the question, "How do I feel about this task?" Research question that used is how motivational and self-regulated relates with student performance on academic task?

In Pintrich's research, there were 173 numbers of 7<sup>th</sup> grade students were randomly selected as the participants. All the students are required to responds a Motivated Strategies for Learning Questionnaire. Research question for this research is are these two motivational and self-regulated learning do influence to student achievement in classroom tasks? The analysis continued by using a Pearson correlation test to analyse the data obtained. Result shows that the higher scores in self-efficacy and intrinsic value were correlated in higher level of self-regulated. As a conclusion, motivational and self-regulated are important components that will implicate the students' academic performance.

Another researcher that is also well known in self-regulated learning is Zimmerman. Zimmerman (2001) defined the meaning of self-regulated learning reported as self-directed development in which individual change their conceptual skills into task that related to academic skills (p. 990). Regarding on Zimmerman's cognitive theory of self-regulated

learning, he claimed that there is one common feature where the learners being proactive and applying regulator on their learning processes and surroundings (Schunk, 2009). This means that the learner setting their targets, implement tactics, manage their learning improvement and them able to revise their own learning strategies if it cannot match with them. This is why in this self-regulated learning research, the learner's approach in self-regulated learning are very important where the motivation to learn is actually dependent on learner. There are there levels of self-regulated learning that has been proposed by Zimmerman. Zimmerman's model was intended to define the nature of self-regulated learning in terms of three levels of cyclical model (Popa & Bazgan, 2014). First is forethought which involve with task analysis and self-motivation. Second level is performance which involve in self-control and self-observation and the third level is self-reflection which involves in self-satisfaction. These three levels also called as "three-phase cyclical model". In summary, Zimmerman (1990) has concluded there were three features that will involves in self-regulated learning which are the learner's use of learning strategies, reaction with self-oriented feedback related in learning effectiveness, and learner's interdependent motivational developments. So, it means student apply the self-regulated learning strategies in order to achieve good academic performance based on the feedback of learning effectiveness and ability.

In addition, another similar research that has been conduct is a research done by Marko Radovan. He does a research on the correlation between student's motivation, learning strategies and their academic achievement (Radovan, 2011). In his research, Radovan is more focus on what self-regulated learning strategies are correlated towards accomplishment in a distance-learning course. The samples used in this research are 319 of university students between the age of 20 to 49 years and all students were randomly selected. This research used the instrument of MSLQ used to measure the student's motivation and learning strategies. In order to evaluate the research question, Radovan administered some methods in this research

such as bivariate and multivariate. Multivariate is important method to identify the relationship between independent on dependent variable. Multiple regression analysis has been used in this research in order to verify the research's expectations. The finding from this research indicate self-efficacy and intrinsic goal orientation are the most influences elements in motivational. In learning strategies, effort regulation is mostly essential. Overall, this research shows that motivation and learning strategies can influences on students' academic performance.

Banarjee and Kumar (2014) also have done a similar research in the same area of research, self-regulated learning and academic success among the graduate students (p. 329). Both researchers considered the meaning of self-regulated learning as to "one's ability to understand and control accordingly his or her own learning environment" (Banarjee & Kumar, 2014, p. 330). Means, the learners independently own their own learning process and try to adopt the learning strategies in order to achieve their goals. This study focuses on relationship of self-regulated learning and academic achievement among science students. Both researchers also claimed that for those student who more likely to have a good performance in academic achievement is due to higher in self-regulated learning. The samples used for this research were 300 undergraduate students that were randomly selected. These samples consisted of 165 male students and 135 female students. This selecting used stratified random sampling. All the students are required to complete the scale of self-regulated learning that consists of 46 items and students rating themselves on a five point scale. For this study, both researchers used Karl Pearson's correlation and T-test in order to analyse the data that has been acquired. A hypothesis for this research was there a significant relationship between self-regulated learning and academic achievement'. The result showed that the value of  $r$  is .113 where the level of significance is .05, therefore there is significantly